

Meeting WISHA Training Requirements

- To meet the WISHA training requirements for eye protection, you must include information specific to your worksite as indicated in slides # 7, 12 & 16.
- Preview this program and include your specific workplace information before conducting the training.
- It is recommended you keep an attendance roster for your records to document training.

How To Use This PowerPoint Program

- Users with PowerPoint can download, edit, and use the program for training with a laptop and multimedia projector.
- Additional information is also found in the Notes section of this presentation below the slides. You can read the text in quotations found in the Notes section or use your own words.
- If you want to print out this program, the PDF file uses less computer memory and prints faster.



Eye Protection

The following topics are covered:

Workplace Eye Hazards

Types of Eye Protection

Use & Care of Eye Protection



Your Eyes

What can be more precious than your sight?



What if you could no longer see this?

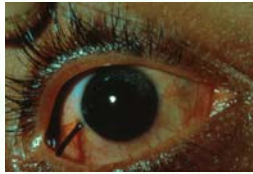


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“Most of you would no doubt agree that blindness or near blindness resulting from a workplace incident would be pretty devastating. Our eyes are actually fairly tough and have some built-in protection, but are still vulnerable to damage from a number of workplace hazards as well as hazards outside of work. We have an obligation as your employer to assess our workplace for eye hazards and provide you the appropriate eye protection and training to keep your eyes healthy.”

Types of Eye Hazards

Flying objects



Particles and dust



Chemicals



Harmful light radiation –
ultraviolet, lasers, infrared



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Eye hazards vary depending on the type of work you do, but these are the main categories.

Sources of Eye Hazards

Flying objects or particles in eye

Grinding



Sanding



Sandblasting



Blowdown



Woodworking



Nail gun use



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“Other activities include drilling, sanding, cutting, chiseling, sawing or any other use of power tools that generates dust or particles. Most of us have gotten dust or dirt in our eyes at one time or another which was easily removed with little permanent damage. But sometimes the injury can be severe enough to require medical treatment or even cause permanent damage. 70% of all eye injuries resulted from flying or falling objects or sparks striking the eye.”

Sources of Eye Hazards

Chemical Hazards

The most dangerous chemicals to the eyes are corrosive liquids.

Examples include acids, lye, bleach, ammonia, sodium hydroxide and formaldehyde.

Other chemicals can also be extremely irritating to the eyes.

Some pesticides can be absorbed through the eyes and make you sick.



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“Strong corrosive liquids can cause permanent damage or blindness, if not washed out immediately. Other chemicals can be extremely irritating, but the damage to eyes may not be permanent. It depends on the kind of chemical. A rule of thumb for requiring eye protection for irritating chemicals, is that if they irritate your eyes for more than a day, eye protection should be worn. [Note: your company policies may be more stringent.]

There are also a few other chemicals besides pesticides that can be absorbed through the eyes and cause illness. Material Safety Data Sheets are good sources of information about the potential for eye damage for particular chemicals or products.”

Sources of Eye Hazards

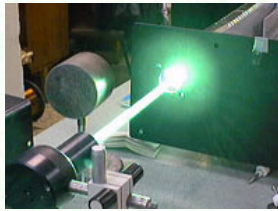
Harmful light radiation



Ultraviolet from welding



Infrared from molten metal



Laser

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“If you have ever stared at a welding operation, you may recall the “sand in the eyes” sensation which can occur several hours after exposure. This effect is usually not permanent, but frequent exposure may cause cataracts. This is of course the reason why welders wear welding helmets with very dark lenses.”

“ Exposure to strong infrared light from molten metal or glass can also cause cataracts over time. Lasers can cause permanent burns or scars to the eye, depending on the intensity, length of exposure or angle of exposure.”

Our Workplace Eye Hazards

We have the following eye hazards at this worksite:

[list or describe]

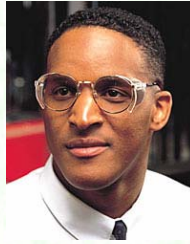
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[If employees are exposed to chemicals, list the specific chemicals or products that are eye hazards.]

Types of Eye Protection

Three Main Types

Safety glasses



goggles



Face shields



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“The hazard determines which type is the best. Safety glasses and some goggles are made of polycarbonate, a very tough impact resistant plastic. Safety glasses made of glass are available, but rather heavy and uncomfortable, and are not as impact-resistant as polycarbonate.”

Laser Eyewear

Laser protective glasses are chosen to match the type of laser used.



[Optional slide]

8-A

[Optional slide. If lasers are used at your workplace, a complete laser safety training program must be developed.] “You must know the wavelength and intensity of the particular laser equipment used to select the correct glasses. Laser safety glasses are not required for low-level lasers – Class I or II lasers, but are required for some Class III laser work and always required for Class IV laser systems.”

Safety Glasses

Side shields or wraparound required



Must meet ANSI Z87.1 Standards for impact resistance



Must be comfortable if worn for long periods



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“ANSI is the American National Standards Institute. Either the safety glasses themselves or the carrying case will indicate that the glasses meet ANSI Z87.1 standards. If they don’t, the glasses are not really safety glasses. Most regular prescription glasses are not strong enough to withstand the force of an object hitting them at high speed. If you wear prescription glasses, prescription safety glasses are available. Some extra-large safety glasses fit over prescription glasses.”

Comfort is important because people tend to remove uncomfortable glasses even when they required. We will make sure you get a good fit if you have to wear them for long periods of time.

Goggles

Required if handling corrosive liquids.

Also provide protection against irritating gases and vapors.

Must be impact-resistant if used for flying object protection.

Some are vented to prevent fogging.



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[This slide can be deleted if goggles are not used.] “Goggles can be used by people wearing prescription glasses as a substitute for safety glasses.”

Face-shields

When are they needed?

Face-shields are necessary when a splash to the face might occur.

Worn over goggles for extra protection.

Special shields are available for infrared or ultraviolet light. →



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[This slide can be deleted if face-shields are not used.]

If you are working with corrosive liquids, a faceshield alone is not adequate since splashes to the eyes can come under the bottom of the faceshield. Also, most faceshields are not impact-resistant.

Care & Maintenance

- ✓ Inspect for damage daily
- ✓ Clean as needed
- ✓ Replace if broken, cracked or if material on the lens or face-shield can't be removed.

Replacements are available at:



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[List or tell where or from who employees can get replacements for broken, damaged or worn out eye protection.]

Eye Protection We Use

Safety glasses are required in the following locations or job tasks:

Goggles are required in the following locations or job tasks:

Face-shields are required in the following locations or job tasks:

Other Protection For Eye Hazards

In addition to personal eye protection,
use the following:

Guards, shields or screens on
machines,

Welding curtains or barriers,

Other barriers during
grinding, cutting, sanding,

Ventilation or hoods for
handling chemicals.



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“These measures are as important as the use of eye protection and must be used whenever possible.”

Emergency Eyewashes

An eyewash station is required for potential eye exposure to:

- ✓ corrosives – acids, caustics
- ✓ strong irritants – many chemicals
- ✓ toxic chemicals - pesticides



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“Eyewashes must be located within 10 seconds or 50 feet of the location where a splash to eyes could occur. Eyewashes are required for strong irritants that cause irritation for a day or more. In agriculture, eyewashes are required for anyone handling pesticides. Other chemicals can be toxic enough to require an eyewash.”

Using an Emergency Eyewash

Note where eyewash is located.

If a chemical is splashed in the eye, go immediately to the eyewash. Get help if needed.

Hold or have both your eyelids held open.

Wash your eyes for at least 15 minutes.

Seek medical attention.



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“It is extremely important to wash the eyes for 15 minutes to completely wash out the chemical. Damage to eyes from corrosives occurs immediately and complete blindness can occur. Caustic chemicals like sodium hydroxide are more difficult to quickly wash out than acids. A few chemicals are water reactive and become more toxic if mixed with water. The MSDS will have that information.” [list any of these chemicals or products if used at your worksite.]

Location of Our Eyewashes

Our eyewashes are found at following locations:

Quiz

Question 1

Prescription glasses can serve as safety glasses?

- a) Yes, if the optometrist says so
- b) Only if they meet ANSI standards
- c) Yes, if they are made of glass
- d) No, they never can

The correct answer is b). a) could be correct if the optometrist can provide proof they meet ANSI impact resistance standards

Quiz

Question 2

Which chemical can cause permanent eye damage?

- a) pesticides
- b) battery acid
- c) paint thinner
- d) all three

b) is the correct answer

Quiz

Question 3

If you splash acid in your eye, you should:

- a) call the doctor
- b) scream loudly for help
- c) get to an eyewash as quickly as possible
- d) leave work and go home

c) Is the most appropriate answer and is the first step. Most people will involuntarily scream or yell from the pain and irritation and may need to be assisted to the eyewash. Unless the chemical is only mildly irritating and disappears after washing out the eyes, a visit to the doctor is also recommended.